



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,075	09/30/2003	Takeshi Konno	TOW-045RCE	8343
959	7590	11/15/2006	EXAMINER	
LAHIVE & COCKFIELD, LLP ONE POST OFFICE SQUARE BOSTON, MA 02109-2127			NGUYEN, NAM V	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/677,075	KONNO, TAKESHI	
	Examiner	Art Unit	
	Nam V. Nguyen	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 August 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-6 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 30 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1.) Certified copies of the priority documents have been received.
 2.) Certified copies of the priority documents have been received in Application No. _____.
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to applicant's Amendment which is filed August 14, 2006.

An amendment to the claims 1 and 3 has been entered and made of record in the application of Konno for an "electronic key system for vehicle" filed September 30, 2003.

Claims 1-6 are pending.

Response to Arguments

Applicant's amendments to the rejected claims are insufficient to distinguish the claimed invention from the cited prior arts or overcome the rejection of said claims under 35 U.S.C § 103(a) as discussed below. Applicant's amendment and argument with respect to the pending claims 1-6, filed August 14, 2006, have been fully considered but they are not persuasive for at least the following reasons.

On page 5, second and third paragraphs, Applicant's arguments with respect to the invention in Yoshida and King does not teach or suggest that the instrument panel being disposed around a handle bar near the center of rotation of the handle bar is not persuasive. The claims in a pending application should be given their broadest reasonable interpretation. In re Pearson, 181 USPQ 641 (CCPA 1974).

As defined by claim 1, the antenna 40 and receiver 42 of King is applied on the rim 39, surrounding the steering wheel 26 (column 3 lines 28 to 30; see Figure 2). The instrument panel 28 is around the steering wheel 26 or the antenna 40 (see Figure 1b and 2). The steering wheel has a center of rotation surround the steering wheel (column 3 lines 30 to 40; see Figure 2). Clearly, King discloses the instrument panel (28) being disposed around a handle bar (26) near the center of rotation of the handle bar (26).

Furthermore, the interior trim of Figure 2 of King is also an instrument panel where a conventional control instrument is located. Such control functions are turn signals, wind shell wiper control signal or cruise control function (column 3 lines 30 to 40; see Figure 2). The interior trim is disposed around a steering wheel 26 at the center of rotation of said steering wheel 26. Clearly, King discloses the interior trim being disposed around a handle bar near the center of rotation of the handle bar.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to put an antenna on the instrument panel near the center of rotation of said steering wheel of a vehicle taught by King in an operation switch panel of a motorcycle of Yoshida et al. with the motivation for doing so would have been to improve appearance of a motor vehicle. The examiner maintains that the references cited and applied in the last office actions for the rejection of the claims are maintained in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US# 5,124,565) and in view of King (US# 6,208,305).

Referring to claim 1, Yoshida et al. disclose an electric power supply control device for vehicle as recited in claim 1. See Figures 1 to 3 and respective portions of the apparatus and method.

Yoshida et al. disclose an electronic key system for a vehicle (see Figures 1 to 4), comprising a control apparatus (16) (i.e. a control unit) mounted on the vehicle (see Figures 3 to 4) and an electronic key (18) (i.e. a code transmitter) for transmitting a response signal (i.e. a response code signal) in response to receiving of a request signal transmitted from said control apparatus (16) through a transmitting antenna (17) (column 5 lines 45 to 62; column 9 lines 13 to 29; see Figures 5 and 11 to 12),

However, Yoshida et al. did not explicitly disclose said transmitting antenna is installed on an instrument panel of said vehicle or a framework surrounding said instrument panel to said

vehicle; and wherein said instrument panel is disposed around a handle bar near the center of rotation of said handle bar.

In the same field of endeavor of integrated antenna in a vehicle, King teaches that transmitting antenna (38) is installed on an instrument panel (28) of said vehicle (20) (column 3 lines 9 to 17; see Figure 1b) or a framework surrounding said instrument panel (28) to said vehicle (20) (column 3 lines 18 to 27; see Figure 2); and wherein said instrument panel (28) is disposed around a handle bar (26) (i.e. a steering wheel) near the center of rotation of said handle bar (26)(column 3 lines 28 to 40; see Figure 2) in order to avoid restricting other components of the vehicle.

One of ordinary skilled in the art recognizes the need to put an antenna on the instrument panel of a vehicle and the instrument panel at the center of rotation of said steering wheel taught by King in an operation switch panel of a motorcycle of Yoshida et al. because Yoshida et al. suggest it is desired to place an antenna in an appropriate position of a vehicle body to transmit and to receive signal between a control unit and a code transmitter (column 4 lines 17 to 29) and King suggests it is desired to place an antenna on a instrument panel or in other location that appropriate position of a vehicle body to transmit and to receive signal between a transponder and engine control unit of a vehicle (column 3 lines 9 to 40) in order to improve useful signal at a low wattage without affecting the aesthetics of the trim. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to put an antenna on the instrument panel near the center of rotation of said steering wheel of a vehicle taught by King in an operation switch panel of a motorcycle of Yoshida et al. with the motivation for doing so would have been to improve appearance of a motor vehicle.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US# 5,124,565) in view of King (US# 6,208,305) as applied to claim 1 above, and in view of Yamamoto (US# 6,078,293).

Referring to claims 2-3, Yoshida et al. in view of King disclose an electronic key system for a vehicle according to claim 1, however, Yoshida et al. in view of King did not explicitly disclose wherein said instrument panel has one or more instruments and a board for securing said instruments thereto, and wherein said transmitting antenna is provided on said board.

In the same field of endeavor of remote keyless entry system, Yamamoto teaches that wherein said instrument panel (1) (i.e. column switch) has one or more instruments (1D to 1E) (i.e. levers) and a board (1C) (i.e. a main body) for securing said instruments (1D to 1E) thereto, and wherein said transmitting antenna (1C) is provided on said board (1C) (column 2 lines 26 to 65; column 3 lines 9 to 44; see Figures 1 to 3) in order to obtain the best transmission strategy for transmitting and receiving signals from a remote keyless entry apparatus.

One of ordinary skilled in the art recognizes the need to put an antenna in a column switch within the switch main body for a keyless entry system of Yamamoto in an operation switch panel of a motorcycle of Yoshida et al. in view of King because Yoshida et al. suggest it is desired to place an antenna in an appropriate position of a vehicle body to transmit and to receive signal between a control unit and a code transmitter (column 4 lines 17 to 29) and Yamamoto teaches that an antenna of a transceiver unit is mounted on a printed circuit board of a switch main body to receive signals from a keyless entry apparatus (column 2 lines 44 to 65;

Art Unit: 2612

column 3 lines 9 to 18) in order to improve the signal receiving sensitivity. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to put an antenna in a column switch within the switch main body for a keyless entry system of Yamamoto in an operation switch panel of a motorcycle of Yoshida et al. in view of King with the motivation for doing so would have been to provide a reliable transmitting and receiving signals in a remote keyless entry system.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US# 5,124,565) in view of King (US# 6,208,305) as applied to claim 1 above, and in view of Caldwell (US# 4,132,994).

Referring to claims 4-6, Yoshida et al. in view of King disclose an electronic key system for a vehicle according to claim 1, however, Yoshida et al. in view of King did not explicitly disclose further comprising a shade mounted around said instrument panel, and wherein said transmitting antenna is installed on said shade; characterized in that said shade is made of a resin, and characterized in that said transmitting antenna is installed on an inner wall surface of said shade.

In the same field of endeavor of radio antenna for motorcycle system, Caldwell teaches that a shade (18) (i.e. a transparent windshield) mounted around said instrument panel (column 3 line 64 to column 3 line 5), and wherein said transmitting antenna (44) (i.e. an elongated antenna element) is installed on said shade (18) (column 3 line 52 to column 4 line 20); characterized in that said shade is made of a resin (i.e. non-conducting or glass windshield), and characterized in

that said transmitting antenna (44) is installed on an inner wall surface of said shade (18) (column 2 line 64 to column 4 line 35; see Figures 1 to 5) in order to avoid damage.

One of ordinary skilled in the art recognizes the need to install an antenna on a windshield of Caldwell in a remote control unit of a motorcycle of Yoshida et al. in view of King because Yoshida et al. suggest it is desired to place an antenna in an appropriate position of a vehicle body to transmit and to receive signal between a control unit and a code transmitter (column 4 lines 17 to 29) and Caldwell teaches that an antenna is mounted on a transparent windshield of a motorcycle (column 2 line 64 to column 4 line 35) in order to avoid damage to the antenna. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to install an antenna on a windshield of Caldwell in a remote control unit of a motorcycle of Yoshida et al. in view of King with the motivation for doing so would have been to provide a reliable transmitting and receiving signals in a remote keyless entry system.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kushida et al. (US# 6,483,467) disclose antenna disposition structure for motorcycle.

Isoda et al. (US# 6,515,580) disclose an antitheft device for vehicles.

Art Unit: 2612

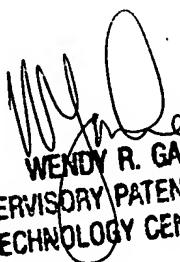
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571- 272-7308. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nam Nguyen
October 27, 2006

[Signature]


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600